A Multi-Language Execution Method

ABSTRACT OF THE DISCLOSURE

A data processing representation is expressed in the form of code sections, which may be nested, using multiple programming languages. The representation is read by an execution engine. The execution engine identifies the language of each code section, and a corresponding language specific processing unit is invoked to process the code section. The processing unit reads that section, identifying sub-sections specified in it's associated language and other sub-sections specified in unknown languages. It executes the sub-sections specified in its associated language with the intended semantics and in the appropriate order. When a sub-section specified in an unknown language is encountered, it delegates processing of that sub-section back to the execution engine, which repeats this process for the unknown sub-section. The execution result is returned back to the requesting language specific processing unit, which continues processing from where it left off.